

Exploring the Significance of the Project Scope in the Successful Implementation of Infrastructure Projects – A Case Study of Level Two Health Projects

Dr. Njeri. S. Ngacha, PhD, OFS¹, Dr. Ronnie Abhukalaf¹ & Vitalis Barasa Orono²

¹Northwestern State University, USA

²Data Collector and Interpreter.

Correspondence: Dr. Njeri. S. Ngacha, PhD, OFS, Northwestern State University, USA. E-mail: njeris@nsula.edu

Received: October 20, 2023

Accepted: December 4, 2023

Online Published: December 7, 2023

doi:10.5539/jsd.v17n1p66

URL: <https://doi.org/10.5539/jsd.v17n1p66>

Abstract

Projects addressing Healthcare stand out to be a critical pillar for sustainable development. According to the Abuja declarations in the year 2000 during the formulation of Millennium Development Goals, the parties agreed to increase their healthcare budget to a whopping 15%. By the end of the Millennium Development Goals, partly no country had reached such a target. It is therefore imperative for Countries to make sure their healthcare budget can address the prevailing needs of their citizens. To make sure the set goals are achieved, it is thus incumbent upon the government to set achievable targets. The focus of this research was to ascertain how project planning plays a nexus role in supporting the healthcare system at level two. The major variable was to assess how the project scope affects such an endeavor and how the existing government policy intervenes in such achievements a case of Kenya Health Policy established in 2014 and running till 2030. The research will be guided by an exploratory research design since it will expedite both Quantitative and Qualitative data from a sample size of 100 respondents. Quantitative data was analysed using SPSS version 25 while Qualitative data was analyzed using the content analysis method. The study findings postulated that most projects were completed within budget while others were not. Delay of disbursement of Funds by the Government to the health facilities was picked as another cause of failure to meet the goal, politics was also noted to play a role in such endeavors. With such findings, the study thus recommended the establishment of a framework that supports better collaboration between the primary parties in the government and the health facilities. The study also acknowledges budget, cost, and planning attributes are crucial to the successful implementation of level-two health projects. This study focused on adding value to the existing body of knowledge and practice as enshrined in the Kenya Vision 2030 blueprint and Kenya Health Policy 2014-2030 blueprint.

1. Introduction

Project Management Body of Knowledge sixth edition defines a project as a discrete, time-limited effort, discrete and entity to deliver an outcome, service or product (PMI, 2017, p.4). The aspect of it being temporary and having a unique feature branch from the fact that projects, albeit being agents of change (Barclay, et al. 2016, p.2), are also defined by their design, location, size, and circumstances (PMI, 2017), and as per Werner (2007, p.193), projects have an approved budget with limited resources, and defined timescale that involves risks with an ultimate goal to achieve a desired positive change. Conversely, Irfan et al. (2021) intimates that planning is an execution of pointing out what must be done and how to do it, as well as allocating and gathering all the resources that will be required to do it.

1.1 Background to the Study

Arumugam (2017) suggests that for any project to start, motivation plays a nexus role since projects are initiated to address issues, solve a problem or point out opportunities on how services can be improved, and pre-determined objectives achieved. Healthcare industry is acclaimed to play a critical role in sustaining prosperity and economic growth (United Nations, 2015). It is therefore crucial that individuals in charge of healthcare project planning, management, and implementation always keep this in mind. Sustainable Development Goal 3 focuses on healthcare-related initiatives by ensuring healthy lives and the promotion of well-being to all at every age set, (UN, 2015). As a result, initiatives to improve healthcare facilities have been initiated in many countries to achieve the

Sustainable Development Goals.

To improve healthcare for all in Turkey, the European Union and the Turkish government committed €90 million (Council of European Development Bank, 2020). Notwithstanding the extensive consequences of Covid 19, several African countries nonetheless financed mega projects to improve the health sector. Amongst these are the Capital Med Medical City in Egypt, the 700 Beds Hospital in Algiers, Algeria, the Code d'Ivoire Regional Hospitals in Côte d'Ivoire, the Komfo Anokye Teaching Hospital in Ghana, and the Zambia District Hospitals Project in Zambia (Abiq Business Intelligence, 2020, para. 1).

Kenyan Con.2010, Fourth Schedule, part 2, states that the National and County Governments have the mandate of guaranteeing the internal and external sources of funding, County governments should deliver value healthcare services and facilities to their resident citizens. Corresponding to research, the Australian Institute of Project Management and Klynveld Peat Marwick Goerdeler (KPMG) (2019, p. 6), posits that, institutions across the world were faced with ongoing challenges when attempting to complete projects within the iron triangle measure of success, scope, time, and cost. The analysis found that only one in five projects were concluded fruitfully. Only 44.0% of projects were accomplished per their specified business intent and objectives.

Consequently, to understand what success means, how to implement successful projects, and how to measure the intended success, numerous factors are key. In measuring the success of projects in Belgium, the Project Success Survey (2018, p.6), found that identifying and agreeing upon a clear scope was crucial to project success at 96.0%. The causes contributing to the failure of projects according to King et al. (2020, p. 1) in Nigeria, were poor planning and communication, frequent scope changes and inaccurate costing. The same applies in the Kenyan context. According to Babu, et al (2019), cost overruns affected 35.0%-60.0% of projects initiated. Several County-initiated projects in Trans Nzoia County had been delayed according to Muchiri et al (2019). Bwayo (2020), in their study stated that, the mega project to construct Trans Nzoia Teaching and Referral Hospital was over budgeted and behind time due to legal and unforeseen technical issues. According to the mentioned studies, it is thus clear that project completion within the plan and scope is unsatisfactory.

1.2 Problem Statement

Different studies have been carried addressing implementation and completion success of projects in the County of Trans Nzoia by Murithi, S. et al. 2017; Mirembe, C. & Otieno, M. 2019 & Tiluk, S. & Mokaya, O. 2021. Various recommendations were suggested by different studies the successful implementation of projects. The rate of success and healthcare projects completion remained a key set back.

In Kenya, the “cash and carry approach,” Hurt the health of the population (Anagwe, 2008). The user fee issue in the African health system created big problems. The Kenyan health system and many of the African countries have lower expected returns on investments and a lack of transparency in funds management. (Azevedo, 2017). Conferring to Urton and Lafontaine (2017) healthcare accounting is unique as it will have a capital-intensive business, professional liability, self-insurance liabilities, Pension liability, regulatory reserves, third-party settlements (govt & managed care), and other areas of estimates and judgments.

1.3 The Research Objectives

The general study focus was to determine how project planning influences the successful implementation and completion of healthcare infrastructure projects.

1.3.1 The Specific Objective

To explore the significance of the project scope in the successful implementation of level two healthcare infrastructure projects.

1.4 The Conceptual Framework

The framework was used to illustrate the relationship between the variables and their indicators. The independent variable was the budget plan and project success was the dependent variable. Kenya Health Policy 2014-2030 was the intervening variable as shown in Figure 1.

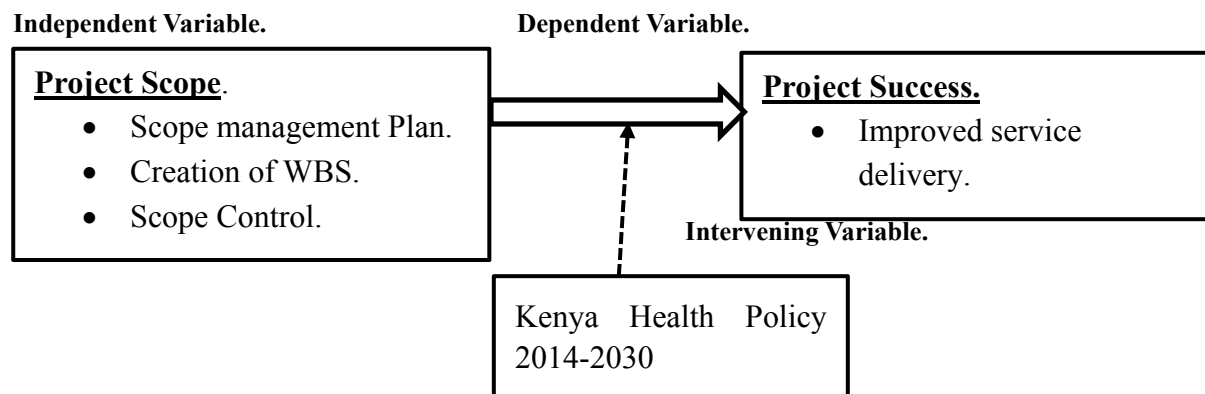


Figure 1. Conceptual framework

Note: Source: Westland, J. 2019 & Megan, K. 2021.

1.5 Conclusion

Different research underpinnings and studies on project planning and project success were addressed in this research work. Research from surveys and studies conducted in Kenya and across the world was analyzed and triangulated with a major aim of creating a balance and striking coherence from a global stage despite the study focusing on health institutions from a developing country. The study's objectives, questions, and assumptions, the study's significance, scope, and conceptual framework were presented. The organization of the study was also highlighted.

2. Literature Review

The variables in this research were further discussed to show the coherence and synergy they are adding and contributing to the existing body of knowledge.

2.1 The Review of the Theoretical Frameworks

The study used two theories: the Theory of Change (TOC) and the Stakeholders theory.

2.1.1 The Theory of Change (TOC)

Centre for the Theory of Change (2023) defines the theory of Change as an essential comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. Furthermore, the Theory of Change is characterized by the stability with which the cycles are interconnected and fulfilled across time, as stated by the International NGO Training and Research Centre (INTRAC, 2017), and how it might be applied to strategic or policy planning by determining where things stand in terms of needs and possibilities, where things should be, and what steps are necessary to get from where things are to where things ought to be (Kusters, 2017, p.129).

2.1.2 The Stakeholder Theory

The theory focuses on different stakeholders according to proximity, power and the urgency on improving efficiencies while equally strengthening relationships by constant updates with stakeholders in the life of the project, (Megan, K. 2022). In addition, backup of all the stakeholders is needed for the success of any given project. For this study, the stakeholder theory was imperative since it helped shed light both for the organization and identified stakeholders.

2.2 Projects Success

In emphasizing the essential role of developing and implementing a better plan to achieve successful projects, Wafula, et al. (2019) held that there is a positive correlation of planning and success of project implementation. While evaluating the social economic impact on project completion, Mukami, 2019 (p. 51) established that planning-related issues, on matters of poor funding programs, incompetent procurement capacity, late material deliver, political influence, and contractors incompetence contribute to the excessive length of time it took to finish projects in the county of Kwale.

2.3 Project Scope Plan and the Implementation of Successful Projects

Team FME, (2014), postulates that it is common for projects to fail at the start. Therefore, the project scope

describes the activities that must be completed to deliver a product, service, or result with the required qualities and features (Team FME, 2014, p. 5). The effective execution of any strategy requires a well-defined scope in which to operate. A project's scope is "the description of the bounds of the project by determining what the project will and will not generate," as stated in Project Management for Development (PM4DEV, 2016). The plan defines the parameters of the undertaking and incorporates feedback from all stakeholders. When a project is well-managed, its scope includes everything that needs to be done to finish the work. Therefore, project scope management primarily focuses on establishing and controlling what is and is not included in the project.

Althiyabi, et al. 2021, describe the overall project scope as the focus on setting major inputs and outputs, and primary purposes of the system being built. It lays out everything that must be done to complete the project and achieve its goals and deliverables. What the project is about, what is included, and what is not included are all spelled out in the project scope, as pointed out by Alexander (2020). This improves the project's chances of success by facilitating the participation of key stakeholders, setting out realistic expectations, and keeping the project's components in line with its goals.

To enhance the chances of project success, according to PMBOK (2017) sixth edition, the following should be included in the project's scope statement: a product scope description that goes into greater depth about the features and benefits of the product, services, or results outlined in project charter as well as deliverables: products, results, services, and the ability to provide them uniquely and reliably that are generated to finish a project.

The Work Breakdown Structure was the most important in terms of predicting the outcome of construction projects in Nigeria according to Kubra, et al (2020, p.46). According to Althiyabi, et al. (2021), a Project Scope Statement helps all stakeholders involved in a project comprehend its goals and objectives by outlining the whole scope of work that will be done. In addition, they highlight the interconnected nature of the project's scope, time, and budget as essential success indicators.

Changes may occur in the implementation of projects. Nevertheless, the way that change is handled over the project's cycle can make or break it. Unchecked alterations to the project's scope, known as "scope creep," might cause it to go beyond its allotted budget and delay its completion. Therefore, a well-thought-out project scope management plan can help avoid this problem by outlining the steps necessary for the project's management and key stakeholders to accept and implement the necessary changes (PM4DEV, 2016).

Owili et al. (2021, p. 65) postulate that clear project scheduling, definition of activities, expected activity time, and sequencing of activities and tasks all contributed considerably to the successful implementation of infrastructure projects in public hospitals. Therefore, it is crucial to have a well-managed scope plan in place to safeguard the project contract, which specifies the project's overall scope, and the project Logical Framework (Logframe), which establishes a causal link between inputs and outputs and the project's objectives (PM4DEV, 2016). This research aimed to shed light on how project scope had influenced the successful implementation of health infrastructure projects in Kiminini Sub-County whose data remain inadequate.

2.4 Research Gap

Numerous experiments have been carried out about the effective accomplishment and completion of projects. In their study, Murithi, S. et al. (2017), Mirembe, C. & Otieno, M. (2019), and Tiluk, S. & Mokaya, O. (2021). However, there is inadequate literature available concerning the influence of project planning specifically the areas of the budget plan in the implementation of successful healthcare infrastructure projects in Kiminini Sub-County, Trans Nzoia County. This is the gap this research endeavored to fill.

3. Research Methodology

This study followed various research protocols and worked within the provided framework to strike a scientific approach that is accepted within the provided standards of research as mentioned in the undermentioned sub-topics.

3.1 Research Paradigm and Design

Pragmatic paradigm guided this research study. Pragmatic paradigm provides a worldview that put emphasis on what works rather than what might be viewed as utterly and empirically exact (Wilson, 2021). Explanatory research design which aims to define the why behind a certain phenomenon by connecting different ideas to define cause and effect-based relationships that highlights factors or reasons behind the happening of certain event was used (Voxco, 2021).

3.2 Site Description, Study Population, and Target Population

Kiminini Sub-County, one of five Sub-Counties in Trans-Nzoia County, was chosen as the study's location. The landmass that is Kiminini totals 395,3 km² (ADP 2019, p. 3). The 2019 Kenya Population and Housing Census

(KPHC, p.16) estimate that 242,823 call the area home. The target population included all level two health facilities in Kiminini Sub-County, the staff of the health facilities, the County Health Board, the staff at the Departments of Health, Public Works, and Finance, Political class, community representatives, and the contractors.

3.3 Sample Frame and Size

All healthcare hospitals within Kiminini Sub-County informed the study sampling frame, heads of the health facilities, staff within these facilities, County departments of health, the County Health Board public works, community representatives and finance, contractors, and political leaders. The study's sample size was one hundred (100) respondents. Twenty respondents were purposively sampled from the sample size for interview purposes as depicted by Table 1 below.

Table 1. Categories of selected respondents

Category (sub-group).	No. of respondents.
County Health Management Board	7
Heads of the Selected Facilities.	5
Staff from the Selected Facility.	32
Department of Health.	18
Department of Finance.	10
Department of Public Works.	8
Political Leaders.	2
Contractors.	6
Community Representatives.	12
Total	100

3.4 Sampling Procedure

According to Hayes, 2021, the stratified random sampling procedure where each member of the subgroup had an equal chance of being selected was used in this study because the results of the stratified random sample may be trusted to be fair and accurate Also used was Purposive sampling which is a non-probabilistic method of picking study participants who have been hand-picked for their exceptional knowledge and set of experiences on a given issue (Etikan, et al. 2016).

3.5 Data Collection Methods

Primary data for this study was gathered using a five-point Likert scale. Bhandari, 2021, posits that in collecting data from respondents a questionnaire is used. An interview guide was used to gather detailed data from among 20 (Twenty) key informants from the sampled respondents. Professional research assistants were hired to oversee the data collection process to guarantee its integrity.

3.6 Validity of the Study

According to Middleton (2019), for a method to be well-thought-out and extremely binding, its outcomes must be consistent with the variances and traits and more, so characteristics seen in the real world. Content validity was dispensed to make sure the questionnaire was developed in collaboration with the supervisors while ensuring it measured the right things.

3.7 Reliability of the Study

According to O'Brian et al. (2018) reliability is defined as the capability of a research method or tool to produce consistent outcomes across multiple tests. TO measure the reliability of the data collection tools, fifteen respondents from Cherangani Sub County which borders Kiminini Sub County was sampled for pilot testing of tools. The questionnaire was administered to the respondents. Internal consistency was measured using Cronbach alpha where a reliability coefficient of .70 or higher was held satisfactory.

3.8 Data Analysis

According to Calzon, (2022), data analysis is defined as the process of assembling, cleaning, analysing, and interpreting data to derive insights for decision-making Original data errors were cleared by categorizing, editing

and statistically analysing data. Descriptive statistics in the form of graphs and charts were used to present the quantitative data that was analysed using SPSS version 25. Qualitative data was analysed through content analysis by expressed data in narrative form. Relational analysis was executed to check how the study variables connected with each other.

3.9 Ethical Considerations

A permit to collect data was issued by the National Commission for Science, Technology, and Innovation (NACOSTI) to the data collector and permission granted too by the County Government of Trans Nzoia's Ministry of Health to access relevant County departments and the selected health facilities. Consent from research respondent was sort with assurance of privacy, data security, and well-being. All aspects of data collection to the analysis level were treated with care and utmost value. All the appropriate works cited in this research were all referenced to avoid the notion of plagiarism.

4. Data Presentation and Interpretation of Findings

Charts and frequency tables were used to present the data in this chapter.

4.1 Demographic Characteristics of Respondents

The gender and profession of respondents were part of the demographic that was used. The demographic results were presented by use of charts.

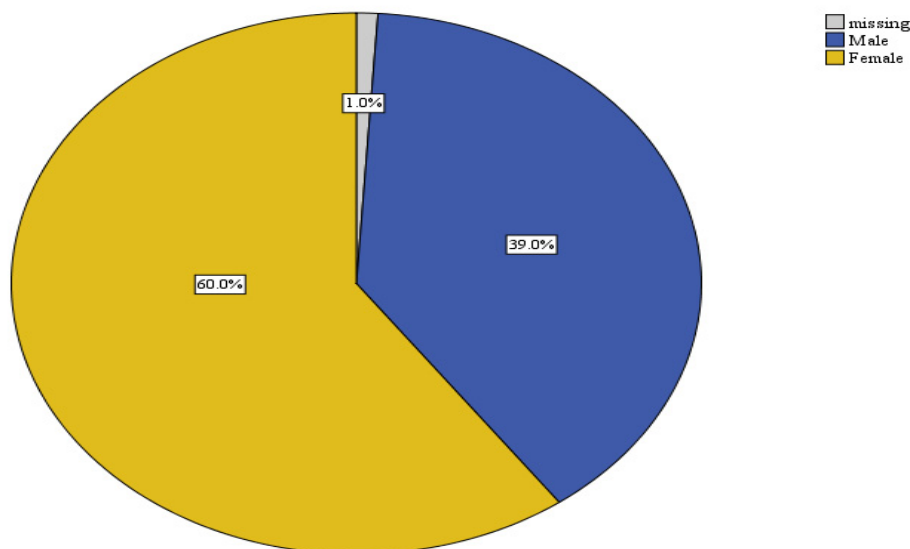


Figure 2. Gender of respondents

The data presented in Figure 2, depicts that respondents who identified themselves as male were 39 representing 39.0 % while those who identified themselves as female were 60 representing 60.0 %. Only one respondent representing 1.0% did not identify with either of the genders.

4.1.2 The Profession of Respondents

Result respondents' professions of their distribution was presented in figure 3.

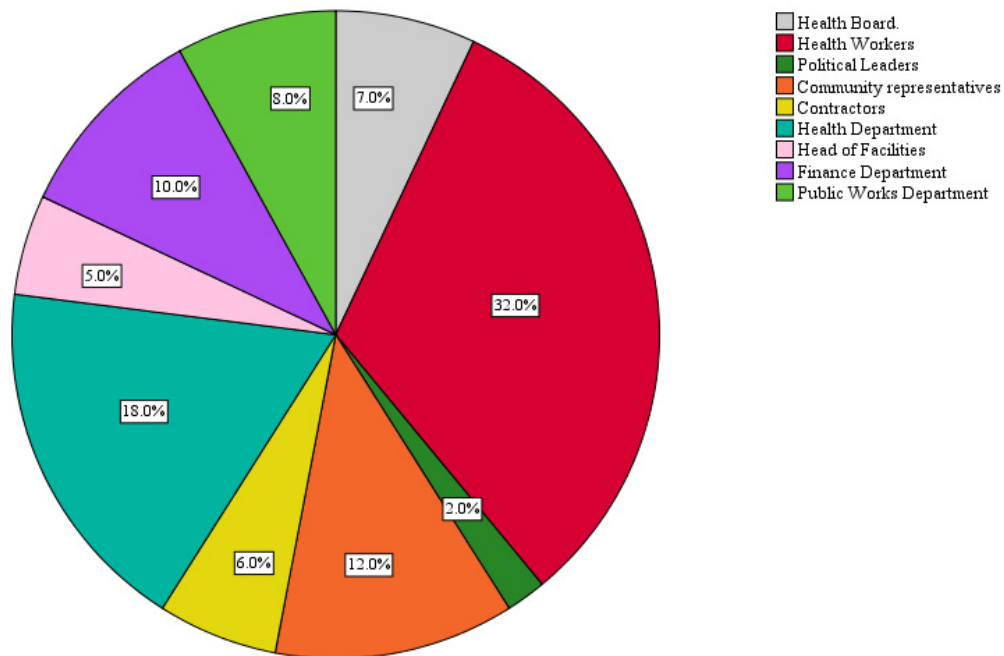


Figure 3. Profession of respondents

The category of profession from Figure 3 indicated that the Health Board had seven (7.0%) of respondents, five (5.0%) of respondents were Clinical officers who were the heads of the selected health facilities under the study. The health workers category comprised had 32 (32.0 %) of respondents, two (2.0 %) of respondents were political leaders while twelve (12.0 %) of respondents were Community representatives. Six (6.0 %) of respondents were Contractors. The Departments of Health, Finance, and Public Works had 18 (18%), 10 (10%), and 8 (8%) of respondents respectively.

4.2 Presentation of Data Analysis

The analysis of data was based on the objective of the study. The variables were examined and presented based on the collected data.

4.2.1 The Analysis of Dependant Variable

The study's dependent variable was project success, which was measured in terms of improved service delivery.

4.2.1.1 Improved Services to the Beneficiaries

The respondents were asked to respond to the statement that the projects had led to improved services to beneficiaries. Results were presented in Figure 4.

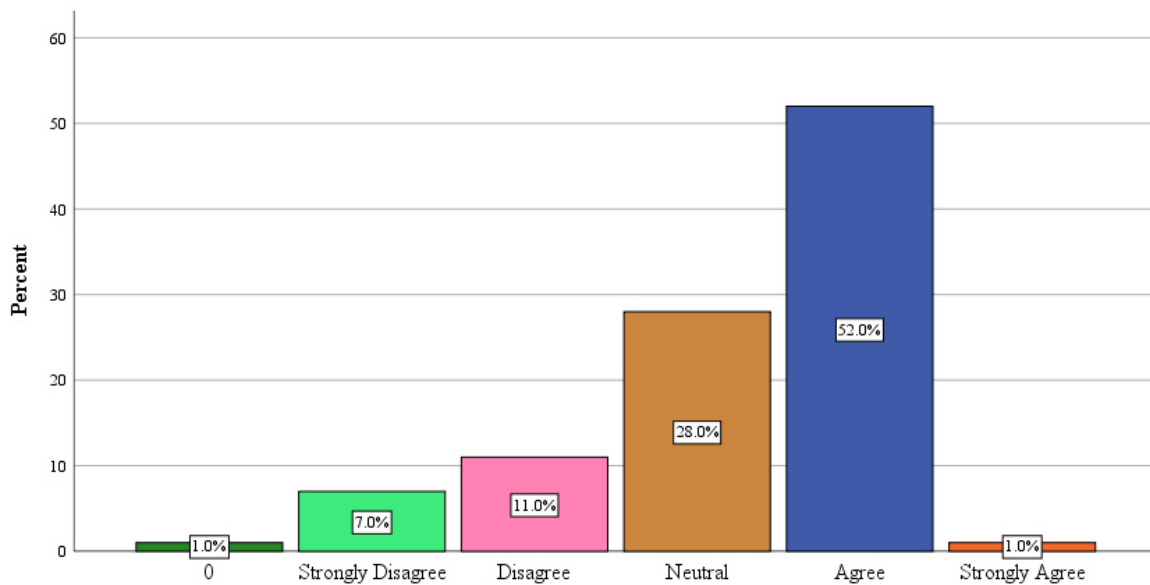


Figure 4. Projects led to improved services to the beneficiaries

The results from Figure 4 indicated that the greatest number of respondents agreed that the projects had led to improved service delivery to beneficiaries at 52.0 %. 11.0 % of respondents disagreed, 28.0 % were neutral, and 7.0 % of respondents strongly disagreed that service delivery to the beneficiaries had improved due to the projects. Only 1.0 % of respondents strongly agreed.

4.2.2 Exploring the Significance of Project Scope on Successful Implementation of Functional Level Two Healthcare Infrastructure Projects

To establish the significance of project scope on the success of healthcare projects, five statements were developed on the definition of the scope management plan, project objectives, scope control, creation of Work Breakdown Structure, and commitment to the defined project scope.

4.2.2.1 The Project Scope Management Plan was Well Defined

The researcher wanted to know if the scope management plan was well-defined for the projects initiated in Kiminini Sub County. The results from the respondents are presented in Figure 5.

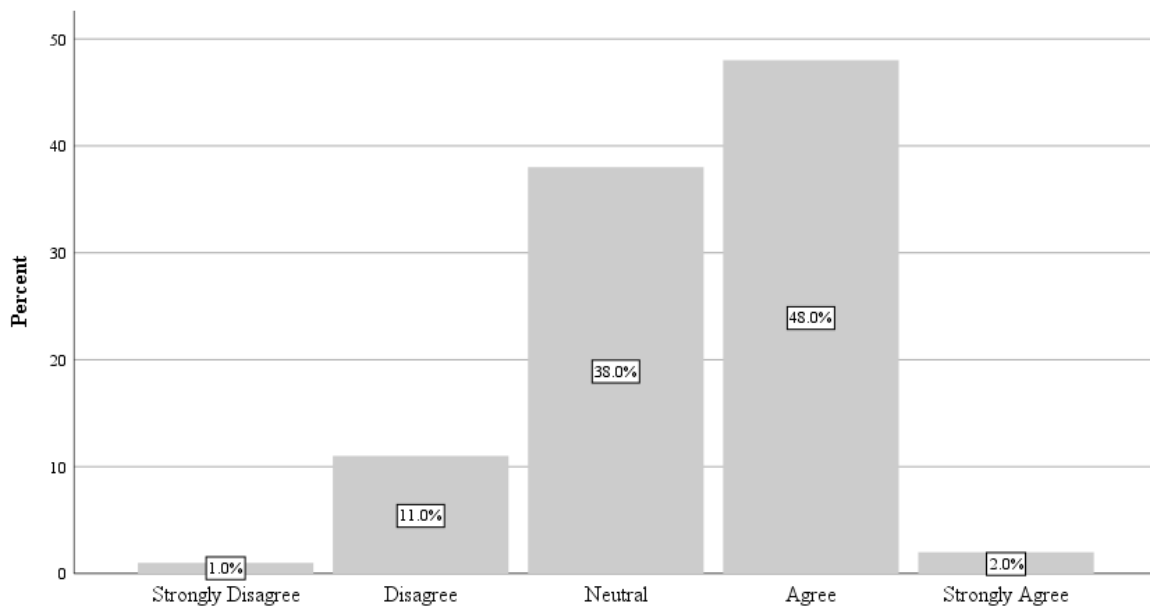


Figure 5. Project scope management plan was well defined

Results presented in Figure 5 indicated that 48.0% of respondents agreed that the scope management plan was well-defined. 38.0% held a neutral view whereas 11.0% disagreed. 2.0% strongly agreed and only 1.0% of respondents strongly disagreed. The results implied that, while a considerable number of respondents were aware of the scope management plan of the projects, a sizeable number (38.0%) of the respondents did not have the details of the scope management plan of the projects.

4.2.2.2 The Objectives of the Project were Defined

The respondents were asked to what extent they agreed or disagreed with the statement that the objectives of the projects had been defined. The results are presented in Figure 6.

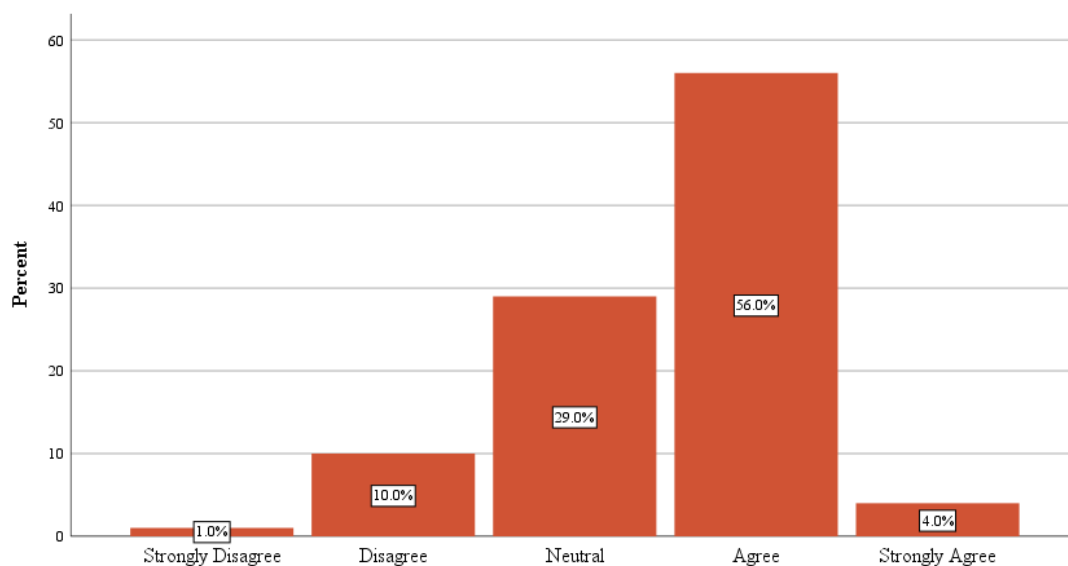


Figure 6. Project objectives were defined

The results from Figure 6 showed that 56.0% of respondents agreed that the project’s objectives were defined. 29.0% of respondents held a neutral view while 10.0% disagreed. 4.0% of respondents strongly agreed and 1.0% strongly disagreed that the objectives were defined. The results implied that most respondents were aware of the objectives for which the projects were initiated and planned for.

4.2.2.3 The Project’s Scope Was Controlled as Planned

The study also asked respondents to indicate their response to the statement that the scope of the project was controlled as initially planned. The results were presented in figure 7.

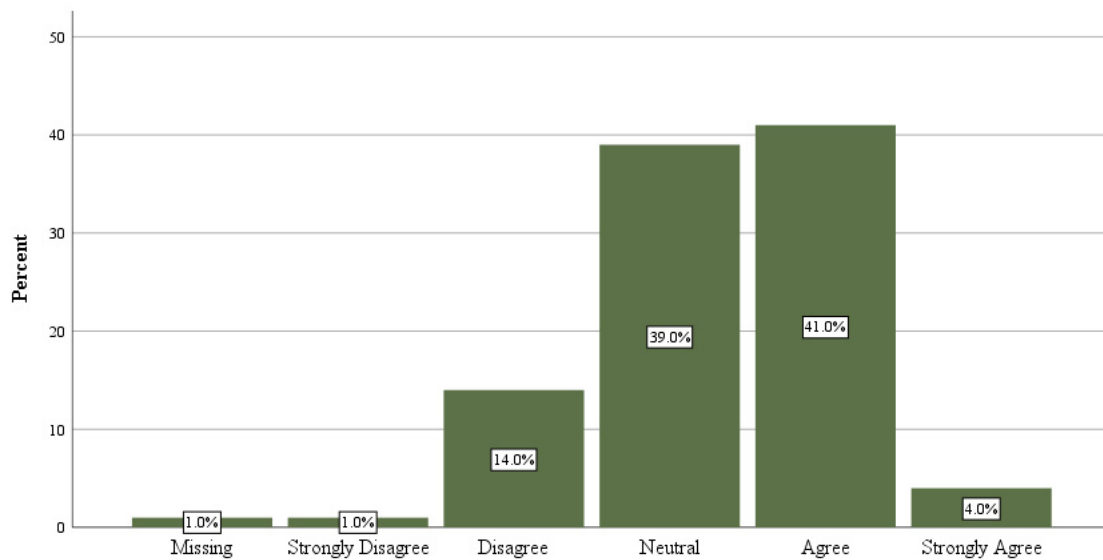


Figure 7. Project scope controlled as planned

In responding to the statement on whether the project scope was controlled as planned, the results presented on figure 7 showed that, 41.0% of respondent agreed, 39.0% were neutral, 14.0% disagreed, while 4.0% strongly agreed. The difference margin on the results between those who agreed and those who were neutral was 2.0% which implied that there was no great awareness about the planned scope and its control during the project life cycle. This was the case with the results presented on figure 7.

4.2.2.4 The Work Breakdown (WBS) Was Created

The respondents were asked whether the Work Breakdown (WBS) was created for the projects. The results were presented on figure 8.

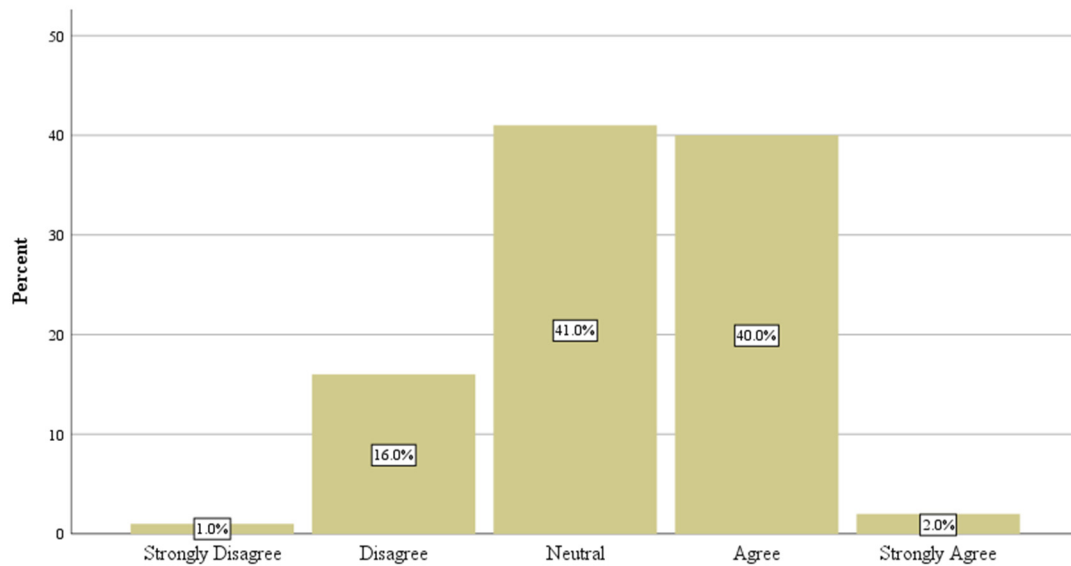


Figure 8. Creation of work breakdown structure

The study results on the question of whether the Work Breakdown (WBS) was created as indicated in figure 8 was that 41.0% of respondents had a neutral view while 40.0% agreed that there was WBS in place. 16.0% disagreed that there was a WBS in place, and 2.0% strongly agreed. Only 1.0% of respondents strongly disagreed. Results showed that while a significant percentage of respondents agreed there was WBS in place, the highest number of respondents remained neutral which implied that they had not many details or knowledge about the Work Breakdown Structure of the initiated projects in Kiminini Sub County.

4.2.2.5 There Was Commitment to the Defined Project Scope

Respondents were asked on whether there was a commitment to the defined scope concerning the initiated projects within Kiminini Sub County. The results were presented in figure 9.

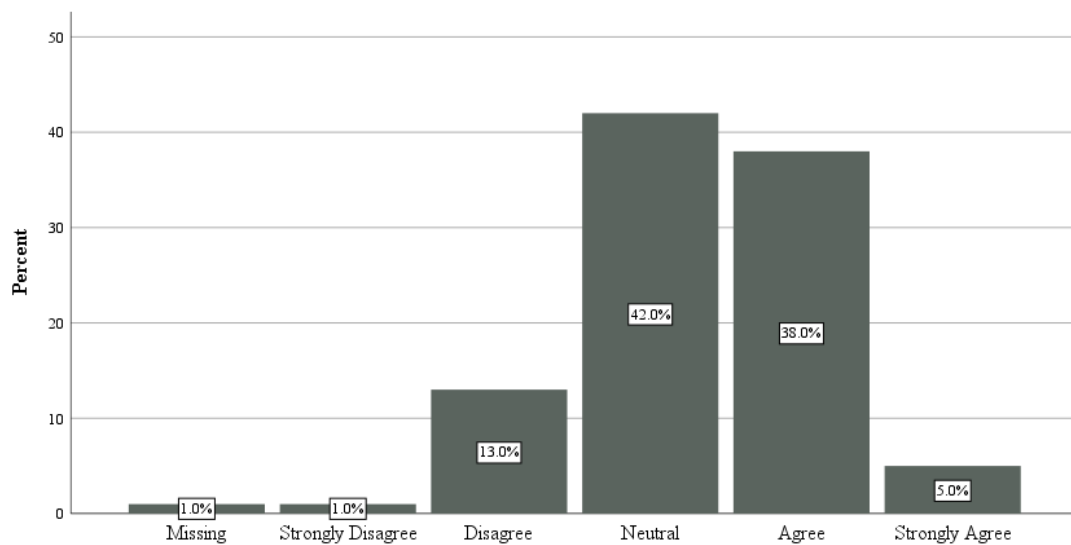


Figure 9. Commitment to the defined project scope

The results presented in figure 9 indicated that 38% of respondents agreed that there was a commitment to the defined scope. 13% of respondents disagreed and 5% strongly agreed. However, 42% of respondents were neutral, as 1% did not respond, and 1% strongly disagreed with the statement. The results implicated that most respondents did not access many details about the aspect of the project scope and related indicators as already indicated in Figures 6, 7, and 8.

4.3 Correlations

Table 2. Correlations

		Success	Scope
Success	Pearson Correlation	1	.605**
	Sig. (2-tailed)		.000
	N	99	99
Scope	Pearson Correlation	.605**	1
	Sig. (2-tailed)	.000	
	N	99	100

** . Correlation is significant at the 0.01 level (2-tailed).

4.4 Findings and Discussions of the Study

Consistent with earlier studies and research, the study confirmed the correlation between project parameters such as scope, schedule, and cost. From the findings of the study, the successful implementation of functional level two healthcare infrastructure projects in Kiminini Sub-County was largely influenced by the lack of available and timely project funding.

Project scope is one of the key aspects of any project planning. From the study findings, 48.0% of the respondents agreed that there was a clearly defined scope management plan, and well-defined objectives (56.0%) while 41.0% agreed that the scope was controlled as planned. One of the informants in the interview noted that “There were clear objectives and scope spelled out for the project and which was made available to the stakeholders. This was meant to make it easier in the implementation and monitoring of the different planned works.” (Respondent 12, 08/09/2022).

However, a significant percentage at 42.0% had a neutral view of the commitment to the defined scope while 38.0% agreed. Concerning the creation of the Work Breakdown Structure for the initiated healthcare projects in Kiminini Sub County, 40.0% agreed while 42.0% were neutral. The narrow margin from the data could be because the important concern for the beneficiaries was to have the project completed and deliver the services as planned. This was echoed by one of the respondents who held that, “whereas the work Breakdown was in place, for the majority of the people, the interest was to have the project completed and deliver on the set objectives.” (Respondent 4, 07/09/2022).

5. Summary, Conclusions, and Recommendations

5.1 The Summary of the Findings.

The findings were presented based on the study’s research question.

5.1.1 The Extent of the Project Scope Influences the Successful Implementation of Functional Level Two Healthcare Infrastructure Projects

The study determined that all Kiminini Sub-County healthcare infrastructure projects had clearly stated scope management plan (48.0%), and defined objectives (56.0%), as 41.0% agreed that the scope was controlled as planned. The project's objectives had been defined, and a WBS had been developed to aid in their realization. Whereas some of the projects had been completed and others delayed or stalled, the study results showed that it was mostly due to a lack of funding, and a holdup in the disbursement of funds that led to the delayed completion of the intended projects within the planned scope. The findings demonstrated that projects could be completed within their original scope when financing is made available on time, resulting in enhanced service delivery for the targeted population.

5.2 Conclusions

While some of the begun projects failed to fulfil their initial scope, budget, and timelines, the study found that others were completed and achieved their goals as intended. The study established that the implementation of healthcare infrastructure projects in Kiminini Sub-County was influenced both by the availability of funds and their timely disbursement. The project timeframes and the completion of the projects within the anticipated scope were also impeded by the delays in budget approval.

5.3 Recommendations

To facilitate the realization of SDG3 goals, Kenya Health Policy 2014-2030, Kenya Vision 2030, and the Big Four Agenda on Universal Health Care, more healthcare infrastructure projects need to be planned and implemented. This will ensure people of all socioeconomic backgrounds have better access to quality healthcare. To ensure public awareness, ownership, trust, and support of all planned healthcare infrastructure initiatives in the community and the County, the study recommends continuous public sensitization, engagement, and mobilization. Seminars and workshops can be beneficial for spreading knowledge, fostering community involvement, and capacity building.

References

- Abiq Business intelligence. (2020). *Top Five HealthCare Projects in Africa*. Retrieved from <https://www.abiq.io/2021/04/11/top-5-healthcare-projects-in-africa/>
- Althiyabi, T. et al. (2021). Predefined Project Scope Changes and its Causes for Project Success. *International Journal of Software Engineering & Applications (I) SEA*, 12. <https://doi.org/10.5121/ijsea.2021.12304>
- Anangwe, A. (2008). Health Sector Reforms in Kenya: User Fees. In *Governing Health Systems*, Sama & Ngueyn, 44–59.
- Anderson, U., & Lafontaine, L. (2017, February 27). *Introduction to Healthcare Accounting*. Audit and Compliance Committee conference, Scottsdale, AZ.
- Arumugam, M. (2017). *What is a Project?* Retrieved from <https://www.pmdrill.com/what-is-a-project/>
- Azevedo M. J. (2017). The State of Health System(s) in Africa: Challenges and Opportunities. *Historical Perspectives on the State of Health and Health Systems in Africa, Volume II: The Modern Era*, 1–73. https://doi.org/10.1007/978-3-319-32564-4_1
- Babu, C., Oswald, A. G., & Sylvester, M. (2019). Appraising the Performance of Construction Projects during Implementation in Kenya, 1963-2018: A Literature Review Perspective. *KICEM Journal of Construction Engineering and Project Management*, 9(2). Retrieved from <https://www.jcepm.org/articles/pdf/8DV8/jcepm-2019-009-02-0.pdf>
- Bahra, A. (n.d.). *What Causes delays and Cost overruns on major infrastructure Projects?* Retrieved from <https://www.constructionproducts.org.uk/news-media-events/blog/2019/may/what-causes-delays-and-cost-overruns-on-major-infrastructure-projects/>
- Barclay, C., & Kweku-Muata, B. (2016). *Strategic Project Management. Contemporary Issues and Strategies for Developing Economies*. CRC Press. Retrieved from <http://projanco.com/Strategic%20project%20management%20contemporary%20issues%20and%20strategies%20for%20developing%20economies.pdf>
- Bhandari, P. (2021). *Questionnaire Design, Methods, Questions, Types, Steps*. Retrieved from <https://www.scribbr.com/methodology/questionnaire/#:~:text=A%20questionnaire%20is%20a%20list,the%20social%20and%20health%20sciences>
- Bwayo, P. (2020). *Delays to complete building Trans Nzoia Referral Hospital Unwarranted*. Retrieved from <https://nation.africa/kenya/counties/trans-nzoia/Trans-Nzoia-referral-hospital/3444800-3493696-format-xhtml-view-asAMP-llksx9/index.html>
- Calzon, B. (2022). *Data Analysis Methods & Techniques*. Retrieved from <https://www.datapine.com/blog/data-analysis-methods-and-techniques/>
- Centre for the Theory of Change. (2023). *Setting Standards for the Theory of Change*. Retrieved from <https://www.theoryofchange.org/what-is-theory-of-change/>
- Council of European Development Bank (CEB). (2020). *Strengthening Health Care Infrastructure for All*. Retrieved from <https://coebank.org/en/donors-and-trust-funds/eu-facility-refugees-turkey/strengthening->

- healthcare-infrastructure-all/
County Government of Trans Nzoia. (2022). *County Integrated Development Plan CIDP 2018-2022 Indicator Handbook*. Retrieved from <https://www.devolution.go.ke/wp-content/uploads/2020/02/Transnzoia-CIDP-2018-2022.pdf>
- Crandon, S. (2017). *Sample Size: A Practical Introduction*. Retrieved from <https://s4be.cochrane.org/blog/2017/09/27/sample-size-a-practical-introduction/>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Hayes, A. (2021). *Simple Random Sample*. Retrieved from <https://www.investopedia.com/terms/s/simple-random-sample.asp>
- INTRAC. (2017). *Theory of Change*. Retrieved from <https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Theory-of-Change.pdf>
- Irfan, K., Hassan, N., Hassan, M., Habib, M., Khan, S., & Khan, H. H. (2021). *Role of Project Planning and Project Manager Competencies on Public Sector Project Success*. *Sustainability*, 13(3), 1421. <https://doi.org/10.3390/su13031421>
- Kenya National Bureau of Statistics. *2019 Kenya Population and Housing Census: Volume I*. Retrieved from <https://housingfinanceafrica.org/app/uploads/VOLUME-I-KPHC-2019.pdf>
- King, M. E., & Manu, R. (2020). Government Project Failure in Developing Countries: A Review with Particular Reference to Nigeria. *Global Journal of Social Sciences*, 19, 35-47. Retrieved from <https://www.ajol.info/index.php/gjss/article/view/193911#:~:text=Some%20of%20the%20causes%20established,cultural%20and%20political%20interference%3B%20poor>
- KMPG, Australian Institute of Project Management. (2019). *The Future of Project Management: Global Outlook 2019*. Retrieved from <https://www.ipma.world/assets/PM-Survey-FullReport-2019-FINAL.pdf>
- Kubra, K., Ibrahim D., & Cross, O. D. (2020). *Influence of project Planning Processes on Construction Project Success in Nigeria*. Retrieved from https://www.researchgate.net/publication/340811564_Influence_of_Project_Planning_Processes_on_Construction_Project_Success_in_Nigeria
- Kusters, C., Batjes, K., Wigboldus, S., Jan, B., & Baguma, S. D. (2017). *Managing for Sustainable Development Impact*. Wageningen University & Research. <https://doi.org/10.3362/9781780449807>
- Masaba, B. B., Moturi, J. K., Taiswa, J., & Mmusi-Phetoe, R. M. (2020). Devolution in Kenya: Progress and Challenges. *Public Health*, 189, 135-140. <https://doi.org/10.1016/j.puhe.2020.10.001>
- Megan, K. (2022). What is Stakeholder Theory? Retrieved from <https://www.projectmanager.com/blog/what-is-stakeholder-theory>
- Middleton, F. (2019). *Reliability and Validity in Research/ Differences, Types and Examples*. Retrieved from <https://www.scribbr.com/methodology/reliability-vs-validity/#:~:text=Reliability%20and%20validity%20are%20concepts,the%20accuracy%20of%20a%20measure>
- Mirembe, C., & Otieno, M. (2019). Influence of Monitoring and Evaluation Strategies on Performance of County Government Funded Projects; A Case of Trans Nzoia County Government, Kenya. *International Journal of Novel Research in Humanity and Social Sciences*, 6(6), 67-95. Retrieved from <https://www.noveltyjournals.com/upload/paper/INFLUENCE%20OF%20MONITORING-2142.pdf>
- Moses, M. W., Korir, J., Zeng, W., Musiega, A., Oyasi, J., Lu, R., Chuma, J., & Di Giorgio, L. (2021). Performance assessment of the county Healthcare systems in Kenya: A Mixed-methods Analysis. *BMJ global health*, 6(6). <https://doi.org/10.1136/bmjgh-2020-004707>
- Muchiri, T. M., Grace, W., & Patrick, S. (2021). Influence of Funding Activities on Completion of Selected County Funded Construction Projects in Kitale Town, Trans Nzoia County, Kenya. *Saudi Journal of Engineering and Technology*. <https://doi.org/10.36348/sjet.2021.v06i03.002>
- Mukami, T. M. (2019). *Socio Economic Factors Influencing Completion of Selected County Funded Construction Projects in Kitale Town*. Retrieved from

- http://erepository.uonbi.ac.ke/bitstream/handle/11295/152819/Mukami_Socio%20Economic%20Factors%20Influencing%20Completion%20Of%20Selected%20County%20Funded%20Construction%20Projects%20In%20Kitale%20Town,%20Trans%20Nzoia%20County,%20Kenya.pdf?sequence=1
- Muriithi, S. H., Makokha, E., & Otieno, C. (2017). Factors affecting timely completion of public construction projects in Trans Nzoia County. *International Journal of Scientific and Research Publications*, 7(4), 404-434. Retrieved from <http://www.ijsrp.org/research-paper-0417/ijsrp-p6459.pdf>
- O'Brian, J., & Orn, A. (2018). *Validity vs. Reliability. The Basics of Validity and Reliability in Research*. Retrieved from <https://research-collective.com/validity-reliability/>
- Oeri, K. J., & Nyaberi, D. (2020). Completion of Public Construction Projects in Trans Nzoia County, Kenya. *International Journal of Research in Commerce Economics and Management*, 7(1), 208-229. Retrieved from <https://www.paperpublications.org/upload/book/FACTORS%20AFFECTING-1496.pdf>
- Owili, O. J. D., & Nyang'au, S. P. (2021). Influence of Project Planning on Implementation of Infrastructure Projects in Public Hospitals in Nairobi County, Kenya. *International Journal of Innovative Development and Policy Studies*, 9(1), 50-68. Retrieved from <https://seahipaj.org/journals-ci/mar-2021/IJIDPS/full/IJIDPS-M-5-2021.pdf>
- Project Management for Development (PM4DEV). (2016). *Project Scope Management*. Retrieved from <https://www.pm4dev.com/resources/free-e-books/7-project-scope-management/file.html>
- Project Management Institute, Pulse of the Profession. (2017). *Success Rates Rise Transforming the High Cost of Low Performance*. Retrieved from <https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse-of-the-profession-2017.pdf>
- Project Management Institute, Pulse of the Profession. (2020). *Research Highlights by Region and Industry*. Retrieved from <https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse-all-comparison-reports-final.pdf?v=dd7afb39-1fe0-4063-923f-11410463244d>
- Project Management Institute, Pulse of the Profession. (2021). *Sub-Saharan Africa*. Retrieved from https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse2021_regional_sub-saharan-africa_final.pdf?v=3875ac8b-4a38-4e9d-b497-9302f9013b19&sc_lang_temp=en
- Project Management Institute. (2017). *Guide to the Project Management Body of Knowledge (PMBOK)* (6th ed.). Project Management Institute, Inc., U.S.A. Retrieved from <https://book.akij.net/eBooks/2018/March/5abcc35b666f7/a%20guide%20to%20the%20project%20management%20body%20of%20knowledge%206e.pdf>
- Republic of Kenya. (2010). *The Constitution of Kenya 2010*.
- Selina, W., & Willy, M. (2017). Factors Influencing Completion of County Government Funded Projects in Trans-Nzoia County. *International Journal of Management and Commerce Innovations*, 4(2), 74-83. Retrieved from <https://www.researchpublish.com/upload/book/FACTORS%20INFLUENCING-3785.pdf>
- Tabu, N. (Producer). (2021, December 18). *Republic Devolved: Taking Stock of the Decentralization of government, 9 Years on*. (Citizen Tv Episode). Retrieved from <https://www.youtube.com/watch?v=hyq1N10IDbg>
- Team FME. (2014). *Project Scope Management*. Retrieved from https://edisciplinas.usp.br/pluginfile.php/3741148/mod_resource/content/1/Texto%20-%20scope%20management.pdf
- Tiluk, S. & Mokaya, N. (2021). Effects of Stakeholders Engagement on the Implementation of Physical Infrastructure Projects in Public Secondary Schools: A Case of West Pokot and Trans Nzoia Counties, Kenya. *Asian Journal of Education and Social Studies*, 25(4), 1-10. <https://doi.org/10.9734/ajess/2021/v25i430606>
- Trans Nzoia County Annual Development Plan 2019-2020. Retrieved from <https://repository.kippra.or.ke/bitstream/handle/123456789/816/2019-2020%20Trans%20Nzoia%20County%20ADP.pdf?sequence=1&isAllowed=y>
- Trans Nzoia County Annual Development Plan 2020-2021. Retrieved from <https://www.transnzoia.go.ke/wp-content/uploads/2019/09/revised-trans-nzoia-county-annual-development-pla-adp-2020-2021.pdf>
- United Nations. (2015). *Sustainable Development. Goal 3: Ensure Healthy Lives and Promote Well-Being for all at all ages*. Retrieved from <https://sdgs.un.org/goals/goal3>

- Voxco. (2021). *Exploratory Research vs Explanatory Research*. Retrieved from <https://www.voxco.com/blog/exploratory-research-vs-explanatory-research/>
- Watt, A. (n.d.). *Project Management; Budget Planning*. Retrieved from <https://opentextbc.ca/projectmanagement/chapter/chapter-12-budget-planning-project-management/>
- Werner, R. T. D. (2007). *Project Governance – Phases and Life Cycle*. PhD Student Radboud University of Nijmegen, The Netherlands. Retrieved from <https://www.mnmk.ro/documents/2007/2007-24.pdf>
- Wilson, M. (2021). *What is Pragmatism*. Retrieved from <https://www.restaurantnorman.com/what-is-a-simple-definition-of-pragmatism/>

Acknowledgments

We greatly appreciate the valuable support from Northwestern State University of Louisiana School of Business, the Director and the Dean for the invaluable support, and every faculty team member who took the time to participate in this scholarly work either directly or indirectly.

Authors contributions

Dr. Ronnie Abhukalaf provided some secondary materials about the role of accounting and funding of projects from the developed countries' perspective while Fr. Victor Oroni was key in data collection and analysis, the subcounty being his home area. The main Author Dr. Njeri provided the overall data analysis, research design, reporting, and triangulation of different scientific research work in relation to this study.

Funding

Not applicable.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.